



DEPARTMENT OF THE NAVY

NAVAL HOSPITAL

BOX 788250

MARINE CORPS AIR GROUND COMBAT CENTER
TWENTYNINE PALMS, CALIFORNIA 92278-8250

IN REPLY REFER TO:

NAVHOSP29PALMSINST 6530.2B

Code 0301

12 Feb 99

NAVAL HOSPITAL TWENTYNINE PALMS INSTRUCTION 6530.2B

From: Commanding Officer

Subj: BLOOD UTILIZATION REVIEW PROCEDURES

Ref: (a) NAVMED P-5101 (Technical Methods and Procedures of
American Association of Blood Banking)

Encl: (1) Blood Bank Officer Transfusion Screening Criteria
(2) Blood Bank Medical Officer Transfusion Screening
Criteria
(3) Blood Utilization Review Nurse Transfusion Screening
Criteria

1. Purpose. To establish policies regarding the review of transfusions of blood and blood products.

2. Cancellation. NAVHOSP29PALMSINST 6530.2A.

3. Background. The administration of blood and blood products is associated with a number of risks. To ensure that these risks are at a minimum and that patients are not unnecessarily exposed to these risks, screening of all transfusions of blood and blood products is indicated. For the purpose of this screening program blood and blood products will be considered to include all cellular and acellular blood components exclusive of immunoglobulin fractions (e.g., Rho-GAM, IVIG, Gamma Globulin, Rabies Immune Globulin, etc.), but inclusive of clotting factors and albumin.

4. Policy

a. The blood utilization review process will occur as a function of the Morbidity and Mortality Committee.

b. All transfusions of blood and blood products will be screened on a quarterly basis. Initial screening will be performed by the Blood Bank Officer, the Blood Bank Medical Officer, and the Blood Utilization Review Nurse, using the criteria outlined in enclosures (1) through (3). The screening criteria in all cases are not intended to be absolute guidelines that must be followed, but instead criteria to select cases for more formal review. It is recognized that no set criteria can replace good clinical judgement, and in all cases proper management of the patient should take precedence over arbitrary criteria.

c. A summary of the results of that screening will be submitted to the Morbidity and Mortality Committee. All cases which do not meet the screening criteria will be formally reviewed as part of the morbidity and mortality review process, and that Committee will make a decision as to whether or not the blood usage and/or administration was within the standard of care. The screeners may also submit cases for discussion that meet the screening criteria but have other aspects that are felt to warrant formal discussion by the Morbidity and Mortality Committee, or have merit as teaching examples. All cases not submitted for formal review will be considered to have met standard of care based on the screening review by the Blood Bank Officer, Blood Bank Medical Officer, and Blood Utilization Review Nurse.

d. Any cases determined to deviate from standard of care or Naval Hospital policies by the above review process will be considered an indication for corrective measures. When such a determination is made by the morbidity and mortality review process, that committee will also recommend what action will be taken to correct the problem. A case is only considered a deviation from standard of care or policy if so determined by the morbidity and mortality review process. Failure to meet screening criteria does not necessarily constitute a deviation. Instead, this circumstance is only an indication that further formal review is required.

5. Action

a. Commanding Officer shall appoint in writing:

(1) A Medical Technologist, Laboratory Department as Blood Bank Officer.

(2) A Pathologist or an Internal Medicine Physician as Blood Bank Medical Officer.

(3) A Registered Nurse who is currently certified to administer blood as the Blood Utilization Review Nurse.

b. The Blood Bank Officer shall:

(1) Prepare a report at the end of each quarter listing all blood and blood products transfused, numbers of units cross-matched, and numbers of types and screens performed.

(2) Include in that report a listing of any discrepancies in the criteria listed in enclosure (1).

c. The Blood Bank Medical Officer shall:

(1) Review all available records on all patients transfused according to the criteria listed in enclosure (2).

(2) Obtain reports of screening of blood and blood product transfusions from the Blood Bank Officer (screened according to enclosure (1)) and the Blood Utilization Review Nurse (screened according to enclosure (3)) and generate a combined report summarizing the screening results from enclosures (1) through (3).

(3) Submit that report to the Morbidity and Mortality Committee and lead a discussion at that meeting regarding all cases not meeting screening criteria as well as cases otherwise designated as needing formal review.

d. The Blood Utilization Review Nurse shall:

(1) Review all available records on all patients transfused according to the criteria listed in enclosure (3).

(2) Submit a report of the screening results to the Blood Bank Medical Officer.

e. The Medical Staff through the morbidity and mortality review process shall:

(1) Discuss all cases that do not meet the screening criteria as well as any other cases that the blood utilization screeners feel need discussion, and determine if standard of care and currently applicable policies were met.

(2) Assign the appropriate classification in all cases where standard of care was breached.

(3) Recommend corrective measures to be taken if either a deviation from standard of care or from currently applicable policies was felt to have occurred.

(4) No action need be taken if the determination is made that no deviations occurred.

f. Health care providers shall:

(1) Ensure they follow currently applicable policies regarding the administration of blood and blood products, to include proper patient consent where appropriate and proper procedures in reporting any adverse blood reactions.

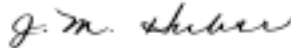
NAVHOSP29PALMSINST 6530.2B
12 Feb 99

(2) Follow the appropriate standard of care in determining when, what type, and how much blood and blood products to administer to their patients.

g. Personnel administering blood and blood products shall ensure that they follow all current guidelines regarding the administration of blood products.

h. Laboratory personnel shall ensure that they follow all current guidelines, regarding preparation and release of all blood and blood products, and that type of screens and type and crosses are done correctly.

5. Applicability. This instruction is applicable for all personnel aboard Naval Hospital Twentynine Palms.



J. M. HUBER

Distribution:
List A & I

BLOOD BANK OFFICER TRANSFUSION SCREENING CRITERIA

1. Was the Blood or Blood Component Transfusion Form (SF 518) properly used to request all products?
2. Were any transfusion reactions reported to Laboratory personnel?
3. Was each unit administered with a type and cross if indicated? All RBC products must be ABO and Rh typed, all cellular products Rh typed.
4. Were any other problems in the requesting, preparation, delivery, or administration of the unit noted by laboratory personnel?
5. Were there any type and hold orders given? (NOTE: all type and hold orders will be formally reviewed at Morbidity and Mortality Committee.)
6. What were the number of units transfused (and the names and identification numbers of transfused patients), the number of units cross matched, and the number of type and screens performed?

Any yes answers to 2 or 4 or no answers to 1, 3 or 5 should be indicated in the quarterly report to the Blood Bank Medical Officer; this report will also include the answer to number 6.

BLOOD BANK MEDICAL OFFICER TRANSFUSION SCREENING CRITERIA

1. Was appropriate informed consent obtained as evidenced by both:

a. Proper completion of the Blood Transfusion Consent Form (SF 518) (signed by patient or guardian) and appropriately filled out Progress Note (SF 509) in which both transfusion reaction and infectious risks are discussed.

b. Documentation in a note addressing the transfusion which indicates that risks versus benefits were discussed with the patient and documents the reason for the transfusion, in the comprehensive Progress Note (SF 509).

Exceptions:

i. Emergency transfusions where documentation of consent is clearly inappropriate such as with major trauma. In cases where the patient can communicate, documentation of verbal consent should still be made in a note addressing the transfusion.

ii. Intraoperative transfusions. When it is anticipated that blood products will be necessary, consent for these as part of the operative consent is encouraged but not required.

NOTE: (1) If blood is given without documentation of consent for the above reasons, the patient's consent should be obtained prior to administering further blood products once they are capable of giving consent. If no further products are to be administered, a retroactive consent for products already given is not required.

(2) A patient only requires one consent per hospital admission. Additional transfusions do not require additional consent.

2. Were there any reactions to the transfusion and were they appropriately reported?

NAVHOSP29PALMSINST 6530.2B
12 Feb 99

Transfusion reactions include all acute and delayed hemolytic reactions, all febrile reactions, all urticarial reactions, all cases of volume overload or noncardiogenic edema, all micro or air emboli, hyperkalemia, any infectious agent transmitted by the blood (including delayed infections), and any other reaction attributable to the blood. Prophylactic use of furosemide (lasix), diphenhydramine hcl (benadryl), or acetaminophen (tylenol) does not constitute a reaction.

NOTE: All cases involving transfusion reactions will be formally discussed in the morbidity and mortality process.

3. Was there documentation of criteria appropriate to the blood product used?

NOTE: (1) Listing of criteria for a product does not imply availability within our hospital of that product.

(2) Indications other than those listed exist, and these criteria should be seen only as criteria to be used to determine cases in which dull discussion in the Morbidity and Mortality Committee is not necessary, and not as indications for the products.

a. Packed Red Blood Cells (PRBC):

(1) Hematocrit <18 or HGB <6.

(2) Hematocrit <24 or HGB <8 in a patient with a chronic anemia that is not otherwise treatable (ie., HIV, cancer, aplastic, etc., but not iron or B12 deficiency) and is symptomatic.

(3) Hematocrit <27 or Hemoglobin <9 in an actively bleeding patient with signs of volume depletion (SBP <100 or P>100), or is symptomatic (e.g., major trauma), or in the clinical judgement of the treating provider the laboratory values do not continue to reflect accurately the changes in the patient's hemodynamic status.

(4) All other cases will be referred to Morbidity and Mortality Committee for formal discussion and decision as to appropriateness of transfusion. Use of autologous blood will be screened using the same criteria as non-autologous blood.

NOTE: All transfusions of patients with immune hemolytic anemia will be referred to Morbidity and Mortality Committee for formal discussion.

Enclosure (2)

b. Whole Blood - All use of whole blood will be reviewed in the morbidity and mortality process; generally, whole blood is only indicated when massive transfusion for resuscitation purposes is necessary

c. Washed RBC's - All use of washed RBC's will be reviewed in the Morbidity and Mortality Committee unless this is a by-product of using frozen blood for a rare type, in which case the unit will be reviewed as in item (a).

d. Platelets:

(1) Platelet count <20K in a patient without a consumptive process.

(2) Count <50K with planned surgery or active bleeding.

(3) Documented dysfunctional platelets with bleeding or surgery (regardless of count).

NOTE: Platelets should generally not be given for a consumptive process such as ITP or TTP regardless of the platelet count unless active bleeding is occurring.

e. Fresh Frozen Plasma (FFP):

(1) FFP is indicated for exaggerated PT and PTT (PT>13, PTT>42) IN AN ACTIVELY BLEEDING PATIENT who has been coumadin anticoagulated or has documented Factor II, V, VII, X or XI deficiency, for which specific component therapy or cryoprecipitate is not available.

(2) FFP is contraindicated solely as a plasma expander.

f. Cryoprecipitate:

(1) Fibrinogen <100.

(2) Von Willebrand's patient with bleeding or pre-op.

g. All other blood product usage will be discussed in depth in the Morbidity and Mortality Committee (e.g., factor use, albumin, granulocytes).

2. Irradiated Products: Any cellular product may be irradiated to prevent graft versus host disease (GVH). This is only indicated for patients with congenital immune

NAVHOSP29PALMSINST 6530.2B
12 Feb 99

deficiency syndromes, bone marrow transplant recipients, intrauterine and neonatal exchange transfusions, Hodgkin's disease, or directed donor units from blood relatives (first degree). All use of irradiated products will be formally reviewed in the morbidity and mortality process.

3. All neonatal transfusions will be reviewed in the morbidity and mortality process.

BLOOD UTILIZATION REVIEW NURSE TRANSFUSION SCREENING CRITERIA

1. Was the product administered properly as documented in the Blood or Blood Component Transfusion Form (SF 518)?

a. Is the "signature verified", "date verified", and "time" blocks in section I correctly completed by a Registered Nurse (RN) or credentialed Health Care Provider (HCP)?

b. Are the "inspected and issued by," "at (hour)," and "on (date)" blocks in section III correctly completed by the laboratory technician?

c. Did a RN or HCP sign the first verifier block in section III and a different RN or HCP sign the second verifier block in Section III?

d. Is the pre-transfusion temperature, pulse, and BP correctly completed in section III?

e. Is the date of transfusion and time started blocks correctly completed in section III?

f. Are the post-transfusion data blocks correctly completed?

(1) Amount given.

(2) Time/Date/Completed/Interrupted.

(3) Reaction Information.

(4) Signature of person noting above (RN or HCP)?

2. Are vital signs documented in the bedside chart every five minutes for the first 15 minutes, every 15 minutes for the first hour, every hour during the remainder of the transfusion, and every four hours for 24 hours following the transfusion?

3. Are any fluids other than normal saline mixed with the blood, as documented in the bedside chart?

4. Does proper notification occur with any reactions/problems noted in section III of the SF 518 or in the Nursing Notes (SF510)?

NOTE: A report on any discrepancies in the above will be submitted to the Blood Bank Medical Officer.